

THE JETLINER CRITICAL REVIEWS FROM 50 YEARS AGO RE-SURFACE

August 10, 1999 marks the 50th anniversary of the first flight of the Canadian designed and built, C-102 Jetliner, from Avro Aircraft in Malton. The Jetliner was the first commercial jet transport to fly in North America and the first regional jet to fly in the world. Like its more famous cousin, the CF-105 Avro Arrow, the Jetliner was not put into production. The Korean war broke out in June 1950 and Avro was directed by then Minister of Munitions and Supply, American born C.D. Howe, to shelve the Jetliner development in favour of production of the Arrow's predecessor, the sub-sonic CF-100 fighter aircraft. As a result of Howe's edict, work on the Jetliner was ostensibly put on hold even though US based National Airlines was interested to the point of negotiating a contract to purchase the Jetliner for inter-city routes.

In contrast, Canada's own national airline company, Trans Canada Airlines (TCA, later Air Canada), was having serious doubts about venturing in to the commercial jet transport business. TCA felt the development of the Jetliner for production purposes was a long way off, citing numerous perceived deficiencies in need of resolution before contracts would be negotiated. The Air Transport Board also felt that years of work remained before a production aircraft would be ready. C.D. Howe himself would later criticize the Jetliner to no end and all this, in spite of the fact that the lone Jetliner prototype flew and flew very well, for several years more, garnering praise from all quarters of the US commercial aircraft industry as well as the US military. Aircraft designer Jim Floyd was the first non-American awarded the prestigious Wright Brothers Medal in 1950, for his work on the Jetliner.

Over the last 50 years, as in the case of the Arrow, controversy has dogged the Jetliner as to whether it was a great aircraft or whether the criticisms of TCA, the Air Transport Board and eventually C.D. Howe himself, the man who effectively initiated the development, were well founded. It is therefore fitting at this juncture, that new archival files on the subject have recently come to light. It must be noted though that this author has been advised that many of C.D. Howe's own files on the subject were in fact destroyed for reasons unknown, in the early sixties. The new files come from the records of TCA and the Air Transport Board.

The first set of files was released to this author in 1996 while the second set was obtained in July of this year. In the TCA files, there is a letter from Jas T. Bain,

Director Engineering and Maintenance for TCA. He is writing to W. F. English, Vice-President Operations in Winnipeg. The letter is dated May 2, 1949, a few months shy of the Jetliner's first flight:

"...Further to my memo this date in regard to the experimental operation of the C-102, I can bring you up-to-date on my last talk to the Avro Company during a recent visit...It was interesting to see the evidence of interest shown by most of the major airlines on this continent. In particular, Eastern Air Lines are serious enough in their discussions that the second prototype will be built with the double slotted flap which will meet Eastern's low landing speed requirement. A physical examination of the aircraft showed a quality of workmanship which I have never seen surpassed on a prototype aircraft nor indeed by many production aircraft. Taken by and large, the skinning and metal work is beautiful and far surpasses the quality achieved by Canadair in production North Stars. They appear also to have left very few ends untied and even in the prototype the general equipment installation design shows enough care and foresight to make the C-102 a really modern aircraft incorporating the best of present installation knowledge." This statement speaks for itself and needless to say, the first and subsequent flights of the Jetliner lived up to this praise.

The files from the Air Transport Board are also noteworthy. It seems that early in 1950, C.D. Howe asked the Board to determine the cost effectiveness of operating the Jetliner, against the Canadair North Star on the Toronto-New York-Montreal route. The report was prepared by the Board's Research Aeronautical Engineering Branch and was presented to A.T. Cowley, Director of Air Services, Department of Transport, June 26th 1950. The report is titled, "Comparative Cost Analysis of the Triangular Route Toronto-New York-Montreal When Using AVRO Jetliner, or Canadair North Star Aircraft". It was stamped confidential. On page 39, the following is noted:

"Certain advantages will accrue to the airline which first employs a jet transport in domestic scheduled transport operations and these are believed to be sufficiently important to warrant a brief examination. Firstly, there should be an increase in traffic due to the superiority of turbine-engined aircraft over conventional types, with respect to passenger comfort. Increased speed will also be an attraction...This study suggests that the Jetliner can be operated at a lower direct cost than the North Star for the route and schedule frequencies chosen...It is quite possible, however, that a comparable analysis of direct cost under the same conditions for a modern twin-engine transport powered by reciprocating engines (such as the Convair 240 or the Martin 404) would show

lower direct costs than those estimated for the Jetliner. In comparison with such aircraft the Jetliner might still be more attractive, however if all factors are taken into consideration, since increased revenues are expected to result from the improved standards of comfort and speed which the Jetliner offers."

Again, the report speaks for itself but like Bain's, it was obviously providing the answers which C.D. Howe and TCA did not want to hear. It begs further the question as to what was truly behind Howe's decision to shelve the project in the face of such interest from US companies and in the face of such glowing and positive reports. Perhaps the answers are in the files that were destroyed in the early sixties. Perhaps more files yet remain to be discovered.

Palmiro Campagna P. Eng
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Gloucester, Ontario

Palmiro is author of the best selling "Storms of Controversy: The Secret Avro Arrow Files Revealed" now in its 3rd edition. He is also author of "The UFO Files: The Canadian Connection Exposed" which contains perhaps the most detailed treatment of the story of the Avrocar, Avro's flying saucer attempt for the United States Government.